AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"); Hawaii Revised Statutes (HRS), Chapter 342D; and Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii,

CITY AND COUNTY OF HONOLULU DEPARTMENT OF ENVIRONMENTAL SERVICES

(hereinafter PERMITTEE),

is authorized to discharge treated wastewater to the receiving waters named Mamala Bay, Pacific Ocean through Outfall Serial No. 001 at Latitude 21°16′47″N and Longitude 158°01′40″W,

from its Honouliuli Wastewater Treatment Plant Located at 91-1000 Geiger Road, Ewa Beach, Hawaii, 96706,

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions," that is available on the DOH, Clean Water Branch (CWB) website at http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2013, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

This permit, including the Zone of Mixing, became effective on March 30, 2014.

A minor permit modification (Pages 4, 19, 21, and 56), became effective on April 17, 2014.

This minor permit modification (Pages 3 and 4) became effective on March 30, 2014.

This permit, including the Zone of Mixing, and the authorization to discharge will expire at midnight. **February 27, 2019**

Signed this 28th day of April, 2014.

(For) Director of Health

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

 During the period beginning with the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge treated wastewater from Outfall Serial No. 001. The discharge shall be limited and monitored as specified below.

Effluent Characteristics	Discharge Limitations ¹				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Measurement Frequency	Sample Type
Flow	2	2	2	MGD	Continuous/ Estimate ³	
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	30	45	2	mg/L	D-11.3	24-Hour
	9,508	14,261	2	lbs/day		
	The average monthly percent removal shall not be less than 85 percent				Daily ³	Composite
Total Suspended Solids (TSS)	30	45	2	mg/L	D 11 3	24-Hour
	9,508	14,261	2	lbs/day		
	The average monthly percent removal shall not be less than 85 percent				Daily ³	Composite

MGD - Million Gallons per Day

lbs/day = 8.34 * concentration (mg/L) * flow (MGD)

² The Permittee shall monitor and report the test results.

Both influent and effluent samples shall be taken, as specified in Part A.2 of this Permit

Effluent Characteristics	Discharge Limitations ¹				Monitoring Requirements	
	Average Annual	Average Monthly	Maximum Daily	Units	Measurement Frequency	Sample Type
pH	Not less than 6.0 and not greater than 9.0			standard units	5/Week ²	Grab
Chronic Toxicity		-	Pass ³		1/Month	24-Hour Composite
Chlordane	0.076 0.024	- ,	0.58 0.184	µg/L lbs/day	1/Month ²	24-Hour Composite
Dieldrin	0.012 0.004		0.27 0.086	µg/L lbs/day	1/Month ²	24-Hour Composite
DDT⁴	0.004 0.001		0.14 0.044	µg/L lbs/day	1/Month ²	24-Hour Composite
Enterococci		5,040 ⁵	72,144 ⁶	CFU/100 mL	1/Day ⁷	Grab ⁸
Total Nitrogen	9	9		µg/L	1/Month	24-Hour Composite
Total Phosphorus	9	9	 1	µg/L	1/Month	24-Hour Composite
Ammonia Nitrogen	9	9	69,700 22,089	µg/L lbs/day	1/Week	24-Hour Composite
Nitrate + Nitrite Nitrogen	9	9	-	µg/L	1/Month	24-Hour

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Compliance with mass-based effluent limitations shall be determined using the following formula and a design flow of 38 MGD:

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Effluent Characteristics	Discharge Limitations ¹				Monitoring Requirements	
	Average Annual	Average Monthly	Maximum Daily	Units	Measurement Frequency	Sample Type
The second second						Composite
Temperature	9	9		°C	1/Week	Grab
Total Oil and Grease	9	9		mg/L	2/Week ²	Grab
Total Petroleum Hydrocarbons	9	9		mg/L	2/Week	Grab
Fats, Oils, and Grease	9	9	11	mg/L	2/Week	Calculate10
Turbidity	9	9		NTU	1/Month	Grab
Remaining Pollutants ¹¹	g	9		µg/L	2/Year	Grab

Compliance with mass-based effluent limitations shall be determined using the following formula and a design flow of 38 MGD:

lbs/day = 8.34 * concentration (mg/L) * flow (MGD)

Both influent and effluent samples shall be taken, as specified in Part A.2 of this Permit.

"Pass". As described in Section B.3 of this Permit.

- DDT shall mean the sum of 4,4'-DDT, 4,4'-DDE and 4,4'-DDD.
- ⁵ Effluent limitation expressed as a monthly geometric mean.
- Effluent limitation expressed as a single sample maximum.

Report enterococci as a geometric mean and as a single sample.

Effluent monitoring shall consist of one grab sample. Enterococci samples shall be analyzed using Method 1600, Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar(mEl) (EPA 821-R-09-016).

The Permittee shall monitor and report the parameter analytical test results.

Fats, oils, and grease is equal to the total oil and grease minus total petroleum hydrocarbons.

The Permittee shall perform semi-annual monitoring on all remaining pollutants listed in Appendix 1 of this permit, except those already specified in the table above. Effluent analyses for metals shall be

reported as total recoverable.

- For individual discharge parameters monitored in the influent and effluent, monitoring shall be conducted on the same day.
- 3. All influent and effluent monitoring shall be arranged so that each day of the calendar week is represented once per month (i.e., for discharge parameters monitoring five (5) days per week or three (3) days per week), or once per two (2) months (i.e., for discharge parameters monitored once per week). If the Permittee cannot arrange monitoring as prescribed, the Permittee shall provide a written explanation of the reasons with the discharge monitoring report.
- Effluent monitoring for total nitrogen, total phosphorus, ammonia nitrogen, nitrate plus nitrite nitrogen, and turbidity shall be conducted on the same day that receiving water monitoring for said pollutants is conducted.
- 5. Samples taken in compliance with the monitoring requirements in Part A of this permit shall be taken at the following locations:
 - Influent Monitoring, Monitoring Location INF: All influent samples shall be taken downstream of any additions to the trunk sewer, upstream of any

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